

Message

From: Fife, Greg [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1EBD5B1EB9104F3E93818DB928C8A313-FIFE, GREG]
Sent: 4/29/2019 3:39:09 PM
Subject: lowerline draft action memo.docx
Attachments: lowerline draft action memo.docx

With regard to whether Radium-226 is a hazardous substance versus a pollutant or contaminant:

Radium-226 is a radionuclide and a hazardous substance according to section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and 40 C.F.R. § 302.4, specifically Appendix B. *See* Attachment 2, Material Safety Data Sheet for Radium.

Legal Information Institute

Electronic Code of Federal Regulations (e-CFR) - Title 40, Protection of Environment - Chapter I, ENVIRONMENTAL PROTECTION AGENCY - Subchapter A, SUPERFUND, EMERGENCY PLANNING, AND COMMUNITY RIGHT-TO-KNOW PROGRAMS - Part 302, DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION - Section 302.4, Designation of hazardous substances.

Protactinium-230	91	46 (3.7E-11)
Protactinium-231	91	10 (3.7E-11)
Protactinium-232	91	0.01 (3.7E-8)
Protactinium-233	91	10 (3.7E-11)
Protactinium-234	91	486 (3.7E-12)
Radium-223	86	1 (3.7E-10)
Radium-224	86	10 (3.7E-11)
Radium-225	86	1 (3.7E-10)
Radium-226	86	1000 (3.7E-13)
Radium-227	86	0.1 (3.7E-8)
Radium-228	86	0.1 (3.7E-8)
Radium-229	86	0.1 (3.7E-8)
Radium-230	86	0.1 (3.7E-8)
Radium-232	86	0.1 (3.7E-8)
Rhenium-187	75	4680 (3.7E-13)
Rhenium-188	75	1860 (3.7E-13)
Rhenium-189	75	100 (3.7E-12)
Rhenium-185 (10.7 hr)	75	10 (3.7E-11)
Rhenium-186 (16.6 hr)	75	46 (3.7E-11)
Rhenium-187m	75	10 (3.7E-11)
Rhenium-186	75	10 (3.7E-11)